

In the Claims:

Please amend the claims as follows:

1. (currently amended) A method for imaging the characteristics of an object ~~by means of~~ with a measuring system, ~~in which the method comprising:~~
moving at least one of the measuring system and/or the object ~~is moved~~ in relation to one another of the measuring system and the object in a predefined direction of movement,
moving the object ~~being moved~~ in relation to the measuring system, ~~in which method~~
illuminating the object ~~is illuminated by means of~~ with incident light, which has limited extension in the direction of movement, ~~and~~
detecting light reflected from the object ~~is detected by means of~~ with an imaging sensor arranged on ~~the~~ a same side of the object as the incident light,
converting the detected light into electrical charges with the image-processing sensor ~~converting the detected light into electrical charges,~~
creating according to which a digital representation of the object ~~is created~~ from the electrical charges,
making wherein the light ~~is made to~~ strike the object at a predetermined distance from the imaging sensor viewed in the direction of movement of the object, and ~~that~~
simultaneously reading out from the digital representation information on ~~the~~ a geometric profile of the object and information on ~~the~~ a light scatter in a predetermined area around the ~~said~~ profile ~~is simultaneously read out from the digital representation.~~

2. (currently amended) The method according to claim 1, ~~wherein~~ further comprising:
dividing the digital representation ~~is divided up~~ into rows and columns, and ~~that~~
creating a compressed image ~~is created~~ from the digital representation by reducing the
number of rows.

3. (currently amended) The method according to claim 2, ~~wherein~~ further comprising:
reducing the number of rows ~~is reduced~~ by summation of the rows of the digital
representation in columns in a predetermined order.

4. (original) The method according to claim 3, wherein the summation is performed by
analog means.

5. (original) The method according to claim 3, wherein the summation is performed by
digital means.

6. (currently amended) The method according to claim 3, ~~wherein~~ further comprising:
saving for each column in the summation by columns information on the row at which
the electrical charge exceeds a predetermined threshold value, indicating that reflected light is
detected just in that row, ~~is saved for each column~~.

7. (original) The method according to claim 2, wherein the compressed image is created
by saving for each column the maximum value for the pre-selected rows.

8. (currently amended) The method according to claim 1, ~~wherein~~ further comprising:
reading out from the digital representation information on an intensity distribution in
addition to information on the geometric profile of the object and the light scatter, ~~information on~~
~~the intensity distribution is also read out from the digital representation.~~

9. (currently amended) An arrangement for representing the characteristics of an object
~~by means of~~ with a measuring ~~system,~~ system in which either the measuring system or the object
is ~~designed~~ configured to move in relation to one another in a predefined direction of movement,
the object being designed to move in relation to the measuring system, ~~which the~~ arrangement
~~comprises~~ comprising:

at least one light source ~~designed~~ configured to illuminate the object with a light ~~which~~
that is incident upon the object and has a limited extension in the direction of movement, ~~the~~
~~arrangement further comprising~~

an imaging ~~sensor, which is~~ sensor arranged on ~~the~~ a same side of the object as the light
source and is ~~designed~~ configured to pick up light reflected from the object and to convert ~~this~~
the picked up reflected light into electrical charges, and

an image-processing unit ~~being designed~~ configured to create a digital representation of
the object from said electrical charges,

wherein the light source is arranged at a predetermined distance from the imaging sensor
viewed in the direction of movement, and ~~that~~ wherein the image-processing unit is ~~designed~~
configured to simultaneously read out information on ~~the~~ a geometric profile of the object and
information on ~~the~~ a light scatter in a predetermined area around said profile.

10. (currently amended) The arrangement according to claim 9, wherein the digital representation is divided into rows and columns and ~~that~~ wherein the image-processing unit is ~~designed~~ configured to create a compressed image from the digital representation by reducing the number of rows.

11. (currently amended) The arrangement according to claim 10, wherein the image-processing unit is ~~designed~~ configured to reduce the number of rows by summation of the rows of the digital representation in columns in a predetermined order.

12. (currently amended) The arrangement according to claim 11, wherein the image-processing unit is ~~designed~~ configured, in the summation by columns, to save for each column information on the row at which the electrical charge exceeds a predetermined threshold value, indicating that reflected light is detected in that row.

13. (currently amended) The arrangement according to claim 9, wherein the incident light is comprises linear light.

14. (currently amended) The arrangement according to claim 9, wherein the incident light ~~consists of~~ comprises a plurality of points or linear segments.

15. (currently amended) The arrangement according to claim 10, wherein the image-processing unit is ~~designed~~ configured to create the compressed image by saving for each column the maximum value for the pre-selected rows.

16. (currently amended) The arrangement according to claim 9, wherein in addition to information on the geometric profile of the object and the light scatter, the image-processing unit is also ~~designed~~ configured to read out information on ~~the~~ an intensity distribution from the digital representation.